



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,127	05/12/2006	Axel Stender	056982/70	6256

31013 7590 04/24/2009
KRAMER LEVIN NAFTALIS & FRANKEL LLP
INTELLECTUAL PROPERTY DEPARTMENT
1177 AVENUE OF THE AMERICAS
NEW YORK, NY 10036

EXAMINER

SPISICH, GEORGE D

ART UNIT	PAPER NUMBER
----------	--------------

3616

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

04/24/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

klpatent@kramerlevin.com

Office Action Summary	Application No. 10/579,127	Applicant(s) STENDER ET AL.	
	Examiner GEORGE D. SPISICH	Art Unit 3616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 3-7 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 8-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Griffiths (U.S. 5,273,308) in view of Green et al. (U.S. Pub. App. 2005/0146098 A1).

Griffiths discloses a valve device for a vehicle air-suspension system, said valve device comprising:

a manually actuatable air-admission valve (Fig. 5, Either element 65 or 66, depending on whether vehicle is being lowered or raised) for admission of air to the air-suspension bellows (Fig. 5, Elements 1, 1A, 2, 2A, 3, and 3A) of the air-suspension device,

a manually actuatable vent valve (Fig. 5, Either element 65 or 66, depending on whether vehicle is being lowered or raised; Col. 7, Lines 34-35 – also, the applicant should note that the claim as drafted does not currently require that one of these valves function as an air-admission valve at the same time as the other of the two valves functions as a vent valve) for venting the air-suspension bellows (Fig. 5, Elements 1, 1A, 2, 2A, 3, and 3A) and

a first actuatable valve (Fig. 5, Element 6 or 7) and,
a second actuatable valve (Fig. 5, Element 6 or 7).

Regarding the function of above device the applicant is directed to Col. 7, Line 1 to Col. 8, Line 8, wherein the function of the device is explained.

Griffiths does not specifically disclose that said system is disclosed in a housing, nor does it specifically state that valves 6 and 7 are electrically actuatable.

Green discloses the use of a vehicle suspension having valves and related components that are stored inside of a housing (Figs. 4-5, Element 13 and Elements 70, 72, 76, 78). In addition Green also discloses the use of electrically actuated valves (elements 70, 72, 76, and 78). The applicant should note that these valves are considered to be electrically actuated valves on the basis that they are controlled through the use of an electronic control unit (Element 12) and are also described as being solenoid valves (See, Pg. 3, Para. 0051-0053). The applicant should note that a solenoid is a current-carrying coil of wire that acts like a magnet when a current passes through it, wherein said solenoid forms a part of an assembly used as a switch, consisting of a coil and a metal core free to slide along the coil axis under the influence of the magnetic field. See, Definition of Solenoid, American Heritage® Dictionary of the English Language: Fourth Edition (2000), *available at* <http://www.bartleby.com/61/70/S0547000.html> (*last visited on 10/7/08*).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Griffiths such that all of the valve components were placed inside a housing, in view of the teachings of Green, so as to make it easier

Art Unit: 3616

for one to swap out an entire unit, so as to make repair quicker and easier, should the device malfunction, thereby reducing labor costs. Moreover, since it is old well known to place components inside of a housing, modifying Griffiths, such that all of the components were placed inside of a housing, in view of the teachings of Green, would have been obvious because all of the elements are old and well known and are being used in the combination according to their established functions and in a predictable manner. Similarly, with regard to the use of electrically actuated valves, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified Griffiths to use electrically actuated valves, for the first and second actuated valves, since it is known to use electrically actuated valves (solenoid valves) and doing so is no more than the predictable use of prior art elements according to their established functions. Further the use of said electrically actuated valves would be desirable, since the use of an electrically signal to actuate the valves would provide a reliable and easy to construct means for controlling said valves.

With respect to claim 2, the combination of Griffiths in view of Green further discloses that said housing includes separate compressed-air ports for supplying compressed air from a pressurized-fluid source to said (i) first and second electrically actuatable valves and (ii) said manually actuatable air-admission valve and said manually actuated vent valve. The applicant should note that modifying Griffiths in view of the teaching of Green results in an apparatus wherein all of the valves and related structures are located in a housing that includes said ports (See, Fig. 4, of Green, wherein the use of ports on a housing are taught by at least elements 70a and

Art Unit: 3616

70b as well as elements 72a and 72b). Accordingly, when modifying Griffiths in view of Green, it would have been obvious to one of ordinary skill in the art at the time the invention to have included all of the necessary compressed air ports, so that one could make the device installable and operable within a vehicle having existing air suspension features.

Regarding claim 9, the combination of Griffiths in view of Green further discloses that said first electrically actuable valve includes a compressed-air inlet in communication with an air-suspension valve of said vehicle air suspension system via a compressed-air port of said housing. As discussed above, the combination of Griffiths in view of Green teaches the use of compressed air inlets (ports).

With respect to claim 10, the combination of Griffiths in view of Green further discloses the use of an electronic control device for controlling said first and second electrically actuable valves. The applicant should note the ECU (Element 12) of Green, which is incorporated into the combination of Green in view of Griffiths. The application should further note that an electronic control device in the combination would merely be used as a means for taking inputs from the operator and vehicle and supplying electrical signals to operate the vehicle in the manner described by Col. 7, Line 1 to Col. 8, Line 8, of Griffiths, and would be a necessary part of operating a vehicle having electrically actuated valves, since as broadly defined, some electronic means would be required to control said electronically controlled valves.

Regarding claim 11, the combination of Griffiths in view of Green further discloses that said first electrically actuable valve includes a compressed air inlet in

Art Unit: 3616

communication with a pressurized fluid source via a compressed air port of said housing. Note the teaching of ports by Green, as discussed above, said ports would be incorporated into the combination of Griffiths in view of Green.

3. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Griffiths (U.S. 5,273,308) in view of Green et al. (U.S. Pub. App. 2005/0146098 A1) as applied to claims 1-2 and 9-11 above, and further in view of Cayzeele (U.S. Pub. App. 2003/0139861 A1) and Rensel (U.S. 6,036,179). The combination of Griffiths in view of Green discloses all of the limitation of claim 8, except for the use of a contactlessly operating displacement sensor disposed in said housing for sensing the distance from said valve device from the road way. Cayzeele teaches the use of an active suspension control means having among other things a displacement sensor for measuring the distance from said device to the road way (Pg. 1, Para. 0003). It would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified the combination of Griffiths in view of Green to utilize operating displacement sensor disposed in said housing for sensing the distance from said valve device from the road way, in view of Cayzeele, so as to enable height to be accurately measured, since measuring the distance to the roadway would provide an accurate measurement of the height of the vehicle. Regarding said sensor being placed in the housing, the applicant should note that Griffith in view of Green teaches placing the entire device in a housing. Accordingly, in adding an operating displacement sensor, it would also be obvious to include this component in the housing, so as to make the entire device easier to install and or replace in the event one of the components fails,

Art Unit: 3616

thereby reducing labor costs for manufacture and repair. The applicant should finally, note that the combination of Griffith in view of Green, further in view of Cayzeele still does not clearly teach that said sensor operates contactlessly. Nevertheless, displacement sensors that operate contactlessly are old and well known. Rensel teaches the use of a contactlessly operable distance / height detecting unit (Element 48). Accordingly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have further modified the combination of Griffith in view of Green, further in view of Cayzeele, so as to utilize a contactlessly operating displacement sensor, in view of Rensel, since this would achieve the desirable result of reducing the number of parts required for the sensor and would also achieve the desirable result of decreasing the likelihood that an object such as road debris would contact the sensor, since no parts would be required to touch the road.

Response to Arguments

Applicant's arguments filed January 13, 2009 have been fully considered but they are not persuasive.

With respect to Applicant's argument that one of ordinary skill in the art would not substitute solenoid valves taught by Green into a system of Griffiths that relies on solenoid valves, Examiner disagrees and maintains the rejection. It is Examiner's position that pneumatic and electrical systems in the vehicle suspension art would properly teach substitution and conversion as these systems, valves and components

Art Unit: 3616

are well known and substituting the valve systems and related components would have been obvious to one of ordinary skill in the vehicle suspension art.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to GEORGE D. SPISICH whose telephone number is (571) 272-6676. The examiner can normally be reached on Monday-Friday from 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul N. Dickson can be reached on (571) 272-6669. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3616

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/GDS/

Examiner, Art Unit 3616

April 20, 2009

/Paul N. Dickson/

Supervisory Patent Examiner, Art Unit 3616